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# Bechuanaland Protectorate.

# Annual Medical and Sanitary Report For the Year 1933.

Printed by
Waterlow & Sons, Limited,
London Wall, London,
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# BECHUANALAND PROTECTORATE

# ANNUAL MEDICAL AND SANITARY REPORT.

## 1933.

## SECTION 1. - ADMINISTRATION.

1. (a) Staff (as at the 31st December, 1933).

European:

Principal Medical Officer.
4 Medical Officers
2 Medical Officers (Temporary appointments)
2 Subsidised Medical Missionaries
2 Hospital Matrons
4 Staff Nurses
1 Welfare Nurse
2 Dispensers
1 Principal Medical Officer's Clerk.

Native:

1 Dispenser
2 Pupil Dispensers
3 Medical Orderlies
4 Male Nursing Orderlies
5 Female Nurses

2. Appointments, Changes, etc., in the Staff.

Dr. Desmond Drew, B.A.,M.B., Ch.B., on leave from 8th January 1933 to 4th April 1933; relieved by Dr. Thompson.

Dr. Hamilton W. Dyke, Principal Medical Officer, on overseas' leave from 4th July 1933 to 1st January 1934, during which period Dr. Drew was appointed Acting Principal Medical Officer, and Dr. Gerber replaced Dr. Drew at Francistown.

Staff Nurse M.S. Thompson resigned on 30th September 1933 on account of illhealth

Miss D. Davis appointed Staff Nurse, Lobatsi Hospital, on 6th October, 1933, vice Miss Thompson.

Miss O.M. Weiss, Matron, Lobatsi Hospital, and Staff Nurse I.M. Southey, resigned on 30th November 1933.

Miss M.I. Kelly appointed Acting Matron, Lobatsi Hospital, on 1st December 1933, vice Miss Weiss.

Miss K. Barr appointed Staff Nurse on 1st December 1933, vice Miss Southey.

Staff Nurse M.G. Gutridge resigned on 31st December,1933.

3. Postings of Staff on 31st December, 1933.

Mafeking:

Principal Medical Officer, Hamilton W.Dyke, M.B.
(On leave).
Acting Principal Medical Officer, Desmond Drew, B.A., M.B., Ch.B.,
1 Clerk
1 Native Orderly.

Francistown:

Medical Officer, Maximilian Gerber, M.A.,M.D.
1 European Dispenser, H.F. Bennett,
1 Native Pupil Dispenser

Serowe:

Medical Officer, Austin Morgan, B.A.,M.B.,Ch.B.,B.A.O.
Matron Miss C.H.Mitchell,
1 Staff Nurse Miss E.F.Cannon
1 Subsidised Welfare Nurse Miss E. Haile
1 European Dispenser T.E. Booker
1 Native Orderly,
2 Native Male Nursing Orderlies,
2 Native Female Nurses (Probationers)

Gaberones:

Medical Officer, E.W.Thompson,M.B.,Ch.B., M.R.C.S., L.R.C.P.
1 Native Male Orderly,

Lobatsi:

Medical Officer, D.J.D. Henderson, M.B., Ch.B.,F.R.C.S.E.
Matron (Acting) Miss M. I. Kelly
3 Staff Nurses. (Miss M.G. Gutridge
(Miss K. Barr
(Miss D. Davis
1 Native Dispenser
2 Native Male Nursing Orderlies
3 Native Female Nurses (Probationers).

Ngamiland:

Medical Officer, R. Meyerstein, M.B.,Ch.B.,
1 Native Orderly.

Tuli Block:

(Vacant).

Kanye:

Medical Missionary (Subsidised) A.N. Tonge, M.D.,
L.R.C.P. & S.
1 Trained Nurse, Miss Bain.

Mochudi:

Medical Missionary (Subsidised). J.E.Fischer,M.B.,
Ch.B.
1 Trained Nurse, Miss Waal.

Molepolole:

Medical Missionary, P.M. Shepherd, M.B.,Ch.B.,D.T.M.
1 Trained Nurse, Miss Ross.

4. Medical Officers and Subsidised Medical Missionaries were maintained at full strength throughout the year - there being no case of invalidism among them.

5. During the year there was a complete change of the European Nursing Staff at the Lobatsi Hospital, one Staff Nurse resigned for health reasons and the other three to get married. Fortunately suitable candidates were secured to fill the vacancies. Nevertheless, such a complete change in the European Staff disorganises and handicaps the work of the Hospital, particularly in so far as it affects the training and supervision of the Native Staff.

6. There were, however, no changes in the composition and the personnel of the Native Staff who all gave satisfactory service; and now that they have had from one to three years in their various spheres, are proving a useful asset to the Medical activities; and lead one to aim at training and employing a larger number as time goes on, with the ultimate aim of using them in charge of Medical outposts.

7. The European and Native personnel of the South African Railways who operate the Rhodesian Railways between Mafeking and Bulawayo receive medical service from the Medical Officers of the Administration whose stations are in proximity

to the Railway line - namely, Lobatsi, Gaberones and Francistown, the Principal Medical Officer stationed in Mafeking being responsible to the South African Railways Sick Fund for the supply of these services.

8. (b) List of Ordinances affecting Public Health during the year - Nil.

9. (c) Financial - in respect of financial years ending 31st March, 1933, and 31st March, 1934.

Ordinary Revenue:

| | | |
|---|---|---|
| Hospital and Dispensary Fees, for year ending 31st March, 1933 | | £526 |
| Hospital and Dispensary Fees, for year ending 31st March, 1934 | | £542 |

Ordinary Expenditure :

| | | |
|---|---|---|
| Personal Emoluments<br>Other Charges | (£8,376<br>(£3,809 | £12,185 ✓ |
| For year ending 31st March, 1933. | | |
| Personal Emoluments<br>Other Charges | (£8,612<br>(£4,308 | £12,920 ✓ |
| For year ending 31st March, 1934. | | |
| Total Expenditure of Protectorate for year ending 31st March, 1933 | | £142,830 ✓ |
| Total Expenditure of Protectorate for year ending 31st March, 1934 | | £185,136 ✓ |
| Relation of Medical Expenditure to Total Expenditure for year ending 31st March, 1933. | | 8.53% ✓ |
| Relation of Medical Expenditure to Total Expenditure for year ending 31st March, 1934 | | 6.98% ✓ |
| Capital Expenditure on additional buildings by grant from Colonial Development Fund, during year 1933 | | £3,509 ✓ |

## SECTION 11. - PUBLIC HEALTH.

10. The Territory as a whole during 1933 has experienced one of the most difficult periods since it came under His Majesty's Administration - due to the occurrence of Foot & Mouth Disease among cattle, necessitating complete prohibition of all animal and vegetable exports; and

also because of a very serious drought resulting in failure of agricultural crops, pastural lands and water supplies. It is unnecessary to elaborate in detail the hardships and misery which two such calamities will produce in a population which, apart from a certain amount of money earned by labourers on the Mines, is solely dependent upon their crops, milk from their cattle, and the sale of their cattle or dairy produce to outside markets. In May the Administration ascertained that owing to the drought there would be throughout the Territory widespread starvation among the native inhabitants and to some extent among the indigent European small settlers. Committees were therefore appointed for each Magisterial District, each consisting of the Magistrate, the Medical Officer and two prominent European inhabitants, and in addition in the native areas, the Tribal Chief. The duty of these Committees was to advise and assist in the distribution of rations to those in distress. Large quantities of grain were purchased by Government and distributed either as a free ration or in the nature of a loan to those who had cattle but were unable to market them. Every Medical Officer working in the Native Reserves states that had these measures not been taken, a very serious state of famine and starvation would have occurred. Notwithstanding this distribution of food there were many cases of bad malnutrition and food deficiency diseases such as Scurvy, etc., The situation was greatly ameliorated towards the end of the year when excellent rains fell and natives were able to furnish themselves with wild spinach and other indigenous forms of wild foodstuffs, as well as milk from their cattle.

11. The rainfall throughout 1933 was 14.108 inches as

compared with 19.95 inches in 1932. Agricultural crops in the Territory are entirely dependent upon a fairly even distribution of rainfall throughout the Summer season from October or November to March. After the dry Winter and Spring of this country the earth is so baked and dry that it is impossible to plough and sow until the early rains have fallen; and unless good rains fall before the end of November it does not give the crops time to mature for harvesting before the first frosts which occur towards the end of May. Then again, unless regular rains are obtained from January to March, crops which have been sown in December and may have started well, wilt and come to nothing. That was the case of the 1933 crop. Fairly good rains occurred generally throughout December and January followed by very little rain in February, March and April, resulting in a general failure of Maize and Kaffir Corn (Millet), which form the staple diet of the native population.

12. The Malarial incidence in like manner is dependent on regular rains, and owing to the scanty and badly distributed rainfall in 1933 the Territory as a whole, except for Ngamiland, was very free of Malaria. Other diseases whose incidence is affected by the rainfall - such as Dysentry and Scurvy - were more frequent in 1933 than in previous years.

13. The general and epidemic diseases that call for comment are as follows :-

(108 Scurvy. 268 Well marked cases presented themselves for treatment at the Outpatient Departments, while many more were probably overlooked having been diagnosed as Rheumatism etc. The Medical Officer, Serowe, in this connection, says: "As early as May and June it was noticed that cases of Anaemia, Debility and Rheumatism were presenting themselves

with more than normal frequency; but these cases, though now known to have been prescorbutic, were not classified as such." Having had in years past considerable experience of Scurvy in natives, I can confirm this observation. Very often the only symptons suggestive of Scurvy are debility and rheumatic pains in the lower limbs, possibly with indurations of some particular muscle (an intramuscular haemorrhage), and some roughness of the skin over the extensor aspect of the forearm at the elbow, but without any bleeding from, or sponginess, of the gums; and unless one is on the lookout the underlying cause of these symptoms is apt to be missed.

14. Another feature of particular interest connected with these cases of Scurvy, and which was particularly marked in the Kanye District but to a less extent in other Districts, was that the scorbutic condition was complicated by symptoms of paralysis suggestive of Beri-Beri. Dr. Tonge gives the following description of such cases; "The condition was found principally in nursing mothers, rarely in men or children. Generalised pains were complained of particularly in the legs, passing on quite rapidly to a flaccid paralysis but with no change in the reflexes. [illegible] Occasionally swellings in the calf muscles were observed, but with no oedema. The gums were soft and spongy, oozing blood freely; urine and faeces were normal, but usually constipation was present. There was no increase in pressure of the Cerebro-spinal fluid of which the cell count was normal. In some cases subcutaneous haemorrhages were observed; extremely severe headaches were frequent; temperature never rose over 99°. Death after a prolonged illness was generally due to some complication such as Pneumonia. Those cases treated in Hospital all recovered,

but many deaths occurred among the villagers suffering from similar symptoms ... Since the beginning of the rains (in November) and the consequent growth of green foods and increased milk supplies, no new cases having the above symptoms have occurred".

15. It is quite obvious that Scurvy was the main sign of a food deficiency, but the addition of the flaccid paralysis suggests deficiency of vitamin "B" as well as "C".

16. During the Spring months so many people at Serowe showed signs of incipient Scurvy that Government supplied for distribution by the Medical Officer large quantities of oranges. This, in addition to the distribution by Government of Maize and Kaffir Corn, undoubtedly saved the Tribe from much illness and starvation.

17. Respiratory Diseases. There were fewer cases of ordinary Respiratory ailments in 1933 than in 1932; Pneumonia, Broncho-Pneumonia and Congestion of the Lungs being notably less. Thus in 1932 a total of 230 cases of these conditions were treated, whereas only 57 in 1933. Undoubtedly the Influenza epidemic which occurred in 1932 was responsible for the larger number in that year.

18. Diseases of the Digestive System. Under this head the only feature requiring comment was that Dysentery and Diarrhoea were generally more prevalent in 1933 than in 1932, the number of cases being 612 as against 324 in the respective years. That unhygienic village water supplies in a period of drought were largely responsible for these illnesses is illustrated by the comparison of the number of people who were treated for these ailments at Serowe and at Molepolole. At Serowe, with a population of some 25,000, 50 cases were treated during the year; whereas at

Molepolole, with a population of some 10,000 104 cases sought treatment. At Serowe the main water supply is from a deep borehole, which is abundant and is protected from contamination; whereas at Molepolole the wells are shallow and not protected from pollution and in addition, owing to the drought, the water supply available was very inadequate.

19. Syphilis. Again Syphilis accounted for practically half of the total new cases attending at the Dispensaries and does not show appreciable signs of being controlled. One is doubtful of successfully combating the scourge until much more adequate means are available - particularly in the Northern Protectorate, Ngamiland, Kgalagadi and Ghanzi. To successfully render the main portion of the inhabitants immune from this disease would necessitate the employment of a much larger medical staff, with unrestricted supplies of the more modern drugs, than the slender Medical Vote permits. The Bismuth preparation "Sobita" has been given a very fair trial and where patients have put up with the pain of the injection the results have been satisfactory. The Medical Officer, Ngamiland, by patient perseverance, has induced most of his native patients to submit to 2 or 3 injections: but in other centres it is sufficient for half a dozen people to be given this line of treatment to practically empty the Outpatient Department. On account of expense the organic Arsenical compounds are administered sparingly; generally they are given to those suffering from manifestly infectious or very active lesions, and then limited to one course of 3 or 4 injections, subsequent treatment being given by the oral administration of Mercury and Potass. Iodid. The natives willingly submit to injection of Arsenical preparations either intravenously or intramuscularly, and indeed clamour for these injections,

but which for reasons of expense cannot be administered as a routine nor for full courses necessary to effect a complete cure. As things are at present, it is quite out of the question to aim at getting a negative Wasserman reaction.

20. It is noticeable that out of almost 10,000 new cases only 8 were detected in the primary stage - by far the greater proportion being in the tertiary period. The large proportion of "tertiary" cases is an indication of inefficient treatment during the infectious and early stages.

21. Yaws. This disease was diagnosed in 86 cases as compared with 117 and 118 cases in the two previous years. Is this because most of the natives already have a Syphilitic infection and so are immune to Yaws.? Or does the similarity of the lesions confuse the diagnosis? Or are there other factors limiting the spread of the disease ? One would be inclined to think that the widespread and more serious Syphilitic infection is inimical to a more widespread Yaws infection.

22. Gonorrhoea. As was pointed out in the Annual Report for 1932, this is increasing. The number attended last year is the same as for 1932, namely 411 cases; but as the total number of Outpatients was less in 1933 than in 1932, it means a higher percentage ratio. But there is no doubt whatever that these figures do not reflect the real incidence of the disease.

23. Tuberculosis. 348 Cases of Tuberculosis were diagnosed. This is a greater number than in any previous year and each of the last four years shows a progressive increase. The number in 1930 was 165, and it therefore looks as though in three years the total number of cases has doubled-

a very disturbing state of affairs, particularly in tribes who are naturally susceptible and whose powers of resistance are lowered by an inefficient diet, by Syphilis and by periodic epidemics of Malaria. Of the 348 cases, 233 were Pulmonary.

24. The distribution of Pulmonary Tuberculosis was fairly even in the Southern districts of the Territory while in the Northern Districts (Mangwato and Tati) it was lower than in the South. The distribution may be of some significance in that up till the end of 1933 native labourers have not been recruited from North of Latitude 22° for work on the Gold Mines in Johannesburg. (Most of the Bamangwato Reserve and the whole of the Tati District lie north of that Latitude). It would therefore appear that Tuberculosis is met with more frequently in those tribes South of Latitude 22° from which labour for the mines is recruited.

Table showing distribution of Pulmonary Tuberculosis in the various Districts of the Bechuanaland Protectorate.

| District | Station | No. of Cases. | Ratio of Pul. Tuberculosis to other Diseases. |
|---|---|---|---|
| **Northern Protectorate.** | | | |
| Mangwato | Serowe. | 11 | .4% |
| Tati | Francistown | 17 | .6% |
| **Southern Protectorate.** | | | |
| Bakgatla | Mochudi | 27 | 1.7% |
| Bakwena | Molepolole | 35 | 1.6% |
| Batlokwa and)<br>Bamalete ) | Gaberones | 31 | 2.5% |
| Bangwaketsi | Kanye | 42 | .6% |
| Baralong and)<br>Bamalete ) | Lobatsi | 43 | 2.5% |

25. Malaria. As in the four previous years, except for Ngamiland and the Chobe District, the Territory was almost free of Malaria in 1933. Careful inspection of possible breeding places showed an absence of Anopheline Larvae though Culicine larvae were abundant. Undoubtedly the scanty and badly distributed rainfall during the rainy season (October 1932 to April 1933) was responsible. Heavy rains, however, occurred in November and December of 1933, and at the time of writing this report (early 1934) Anopheles, Gambiae and other varieties, are appearing over a very widespread area. One would therefore not be surprised if outbreaks of Malaria occurred in the late Autumn. The one possible factor that may restrict such an outbreak is that, there having been little or no Malaria in most of the Territory for four years, it is probable that at present very few of the population harbour parasites in their blood. But this remains to be seen.

26. Blackwater Fever. Only four cases were diagnosed - all in Ngamiland in the vicinity of the Okavango River watercourses where Malaria is endemic for eight months of the year. (3)

27. Smallpox. At Kachikau in the Chobe District there were 4 cases of notified Smallpox (Alastrim). Prompt measures and the fact that vaccination had been widely carried out among the inhabitants of that region in 1929 and 1931 confined the outbreak to these 4 cases. (2)

28. Bilharzia. Until last year this disease had been almost unknown in the Territory, except for an occasional individual case discovered in the Lobatsi District and the Bakgatla Reserve on their borders immediately adjacent to the Transvaal. The cases at Lobatsi - 5 in all - occurred in 1929. They were promptly put through a course of treatment and bathing in the only dam likely to be the source of

infection was forbidden. Since then there have been no more cases there. In the Bakgatla Reserve an occasional individual case presented himself for treatment. As the Bakgatla Tribe are distributed in the Bechuanaland Protectorate and in the adjoining districts of the Transvaal where Bilharzia is known to exist, it was concluded that these individual infections took place outside the Territory. However, during the past year a very widespread infection occurred among the tribal school children at Mochudi, accounting for 100 cases. The Medical Officer states that the infection was contracted in residual pools in the Marico and the Notwani Rivers. No doubt owing to the drought and lack of floods the snails were not washed away from the pools, they became infected from one or other of the individual cases of Bilharzia, and the disease was transmitted to those school children who bathe there. It is hoped that with the succession of heavy floods that have occurred this rainy season, the source of infection will have been removed by the infected snails having been flushed out of the pools.

29. Foot and Mouth Disease. Cases of this condition occurred in two European Officials at Gaberones who took part in a campaign undertaken by the Veterinary Department for the eradication of the disease among cattle. The first case showed a gastro-intestinal disturbance and by chance the Medical Officer, Gaberones, noticed vesicles in the mouth, succeeded later by lesions on the hands and feet. The other case only showed palmar and plantar vesicles. Both cases recovered.

30. Leprosy. Seven Cases of Leprosy presented themselves for ✓ treatment at the Dispensaries. Most of them had already

been seen in previous years. An Institution is required for the country where lepers could be segregated and treated, be it in the form of an asylum or as a leper farm. There are at present some 20 known lepers in the Territory. Probably there are as many again who have not come to light but who would no doubt be discovered were a proper survey made.

31. The only place where Leprosy is known to have affected more than one or two people in a small community is at matsoleje in the Tati District. This community of some 200 Barolong in 1917 came from the Orange Free State to join their Chief, Samuel Moroka, who had been deported from the Orange Free State in 1900. Shortly after their arrival in the Protectorate it was discovered that there were lepers among them. At present there are 7 cases; these include 4 of the cases shown in the Nosological Return for the year, but they were not new infections in 1933. The Medical Officer at Francistown (30 miles away) makes periodic visits to them. He encourages them to go to him for treatment by injections and to observe segregation. No fresh cases have occurred among them in the last two years. The other cases of Leprosy are isolated at cattle posts in remote areas and as there is very little coming and going between them and others, the risk of the disease spreading is small. Nevertheless, it would be an advantage to have all lepers collected into one settlement under medical supervision.

## SECTION III - HYGIENE AND SANITATION.

32. Sanitation. Owing to the very serious financial difficulties of the Territory no attempt was made to initiate any new schemes of sanitation. The sanitary condition of the large native villages ranging from 2,000 to 25,000 people constitutes a problem which, for a primitive and impecunious population, is difficult to solve. Up to the present generally no proper provision for sewage disposal has been attempted. Fortunately scavenging animals, beetles and insects, the action of the strong sunrays and the flushing by storm water, help to minimise what, under other conditions, would be a most serious menace and source of danger. Various systems, such as deep pit latrines, bucket removals, and such like, have been considered, but difficulties of efficient supervision, necessary finances, etc., have made Government hesitate to introduce schemes that might produce more noxious conditions than exist at present. Unless local authorities have the means at their disposal to pay for and enforce sanitary measures and until the Chiefs, Headmen and local inhabitants themselves develop a "sanitary sense", it is considered outside the range of practical administration to attempt to impose sanitary arrangements that sooner or later would prove a failure. By means of education and propaganda, it is hoped that in due course a sufficient number of influential villagers will have developed enough "sanitary sense" to demand better arrangements; and with their co-operation it will then be possible to envisage the organising and carrying out of some simple sanitary schemes of a practical nature. A very few of the more enlightened natives in big native villages have within the last few years furnished themselves with deep-pit latrines. There

is no doubt but that this is the first step which, by patient stimulation, will become more general. In European communities such as Francistown, Gaberones and Lobatsi, "bucket" removals are in operation. In others the deep-pit latrine is used. New Public Health Regulations applicable to European communities are in course of being framed and will enable the Administration to deal with public health matters more effectively than can be done at present.

33. Hygiene. Enough has been said in previous reports on the subject of the poor physique of the Bechuana Tribes generally and the necessity to try and help them to overcome these defects. To a people who live in a semi-arid country which is frequently visited by really serious drought conditions (fortunately not often as severe as that of 1933) the frequent reiteration of advice to grow plenty of vegetables which need artificial watering, to use plenty of water for bathing themselves and washing their clothes, must become mere platitude and lose much of its value as they have not the means to conserve rain water on an adequate scale or to obtain water from underground sources except from the shallow wells which they excavate in the vicinity of a dry water course and from which water is drawn up by hand without mechanical aid. Indeed, for several months of the year the average Mochuana house-wife has to spend two to four hours and more each day to procure just sufficient water for culinary purposes in her home.

34. The provision of tribal water supplies at Serowe, Kanye and Mochudi villages where water is pumped up by

motor power from boreholes, has greatly ameliorated conditions in the immediate vicinity of those places. But nowhere else in the Territory do these conditions exist, except in European communities. Likewise the watering of their herds of cattle generally means four or five hours' work daily, drawing the water from the wells.

35. Fortunately so far the Territory has escaped epidemics of Enteric and Typhus Fevers, but one ventures to predict that should either disease occur as an epidemic in villages of anything up to 25,000 people, with no sanitation and inadequate water supplies, the mortality would be very serious.

36. Social and Welfare Work. In the report for 1932 reference was made to the appointment at Serowe of a highly qualified European Nurse under the aegis of the London Missionary Society to whom Government contributes a substantial subsidy, to conduct a centre for Maternity work and Mothercraft. As will be seen from the report of Miss Haile, the Welfare Nurse (Appendix V.), the result of her first year's endeavours are most satisfactory. There is no doubt whatever but that a worker of her type is getting at the homes of the people in a way that no other person could do. Such home influences are going to give the children in their earliest years a background which will enable them to benefit far more from the education that they will get in later years when they go to school than will the native child with indifferent, or indeed adverse home influences.

37. School Medical Inspections are carried out as far as the time of the Medical Officers will permit. In the Annual Medical Report for 1932 an analysis was made in tabular form showing the age weight of Bechuana children compared with that of standard European children of the same age. That analysis was in respect of children of the Bakwena and Mangwato tribes, and showed that those children at 14 years were 21.6% lighter in weight than European children of the same age. Dr. Tonge has furnished statistics taken in 1933 of 1,105 school children of the Bangwaketsi tribe. His records show that the average Ngwaketsi school child of 14 years is 27.1% lighter than a European child of the same age, that their height is 8" less and that their chest measurement 2" less than European children of a corresponding age.

38. Examination of Mine Recruits. The examination of recruits for work on the Gold Mines in Johannesburg is not compulsory in the Protectorate. Recruiting agents are paid by the Recruiting Corporations a "per capita" sum for each recruit sent to Johannesburg. Should a recruit be rejected by the Mine Health Authorities, the recruiting agent suffers a pecuniary loss; so to protect themselves most agents make their own arrangements with the nearest Doctor in the Territory to have his recruits examined at an agreed small examination fee. Up to the end of 1933 no recruits were taken from North of Latitude 22° as the Mining Authorities considered that natives from the tropics were on health grounds unsuitable for underground work. However, as an experiment, from the beginning of 1934 a certain number are being recruited from north of Latitude 22°. They will be subjected to very careful medical examination both at their source of recruiting and on arrival in Johannesburg, and during their period of work on the Mines they will be kept

under particular observation to see whether they can stand the conditions of work as well as natives ordinarily recruited from south of Latitude 22°.

39. Appendix VI. is an interesting and valuable Memorandum furnished by Dr. Shepherd of Molepolole to show the proportion of recruits who are unfit for labour on the Mines, and the detailed reasons for their rejection. Molepolole is the Headquarters of the Bakwena Tribe and is situated on Latitude 24.5° South.

## SECTION IV - HOSPITALS AND DISPENSARIES.

40. Dispensaries. During the year under review the total Outpatient attendances were 41,220, comprising 22,815 first attendances and 18,405 subsequent attendances. This total is 4,300 less than in 1932. The main reason for this diminution was that owing to the widespread epidemic in the Territory of Foot & Mouth Disease very strict restrictions were imposed on the movement of cattle, and ox-wagon transport practically ceased. A very large proportion of patients are conveyed from their homes to the Dispensaries and Hospitals by ox-wagons, and as the natives were deprived of this means of conveyance, many of them were unable to go for advice and treatment.

(45652)

41. Dispensary Attendances : 1933.

| | First Attendances. | Subsequent Attendances. | Total. |
|---|---|---|---|
| Lobatsi | 1,728 | 1,950 | 3,678 |
| Maun | 2,975 | 1,061 | 4,036 |
| Serowe | 2,363 | 4,414 | 6,777 |
| Kanye | 7,463 | | 7,463 |
| Gaberones | 1,219 | 2,396 | 3,615 |
| Molepolole | 2,109 | 6,317 | 8,426 |
| Francistown | 2,569 | 2,267 | 4,836 |
| Mochudi | 1,513 | | 1,513 |
| Mafeking | 876 | | 876 |
| | 22,815<br>(30006) | 18,405 | 41,220<br>(45652) |

42. Last year in an attempt to give treatment to those villages far distant from the Government stations, the following Outstations were visited by the Medical Officers:-

| | | | | |
|---|---|---|---|---|
| From | Serowe | Monthly | Shoshong. | Population 5,000<br>60 miles distant. |
| " | " | " | Madinare & area | Population 10,000<br>120 miles distant. |
| " | Francistown | " | Makaleng & area | Population 5,000<br>45 miles distant. |
| " | " | " | Tonoto & Area | Population 5,000<br>25 miles distant. |
| " | " | " | Tsessebe | 30 miles distant |
| " | Gaberones | Fort-nightly | Ramoutsa & area | Population 8,000<br>23 miles distant. |
| " | Maun | Every 2 months | Tsau & Toteng | Population 2-3000;<br>100 miles distant. |
| " | " | 3 times annually | Ghanzi & Kalkfontein. | Population 2-3000;<br>250 miles distant. |

43. At certain of the outstations the Headman and his people have provided huts to serve as consulting room and dispensary.

44. In addition, the Medical Missionary from Kanye visits monthly Manyane and area, population 4,000, 30 miles distant; and the one from Molepolole - Gabane and area, population 3,000 - 35 miles distant.

45. Now that their confidence is being won, the inhabitants show their appreciation of such periodical visits by turning out in increasing numbers. Unfortunately, owing to the Medical men being single-handed on their stations it happens at times that a Doctor may have at his station serious cases which he cannot leave, or during the rainy season the roads (which are at best mere tracks) may be impassable to motor vehicles just at the time when the periodic visit is due, and the patients who have collected at the outstation have to return to their homes unattended and disappointed, and their confidence for future visits is shaken.

46. In the case of the outstations in Ngamiland visited from Maun the journeys are a formidable undertaking owing to the heavy sand through which the track has been made. Each visit to Tsau and Toteng necessitates the Medical Officer being absent from his station four days; and those to Ghanzi and Kalkfontein, twelve to fourteen days. This means that the people of Maun, where Malaria and Blackwater Fever are endemic, are without a Doctor for long periods.

47. These outstation Dispensaries are a "Faut de mieux" until such time as finances permit of a better medical service - be it by European or Native agency. Though no concrete scheme has been decided on, an endeavour is being made to train male and female workers, who would be placed permanently at outposts where they would be supervised by the Medical Officers and Medical Missionaries.

48. The opportunities for training them are fair, but the necessary funds for their employment are inadequate at present so that if such a scheme comes into being it would have to be on a very limited scale and of slow growth. Were funds available another means of giving medical help to remote areas such as the Kgalagadi District and the Botletle valley would be by travelling dispensaries, but until the finances of the Territory improve such a scheme can only be envisaged but not carried into effect.

49. Hospitals. The number of Inpatients who received Hospital treatment during the year was 839 as compared with 728 in 1932. Of these (565) 618 were treated at Government Institutions and (163) 221 in Mission Hospitals. The admissions were as follows

| | | |
|---|---|---|
| ✓ Lobatsi Government Hospital. | 319. | (24 beds for Natives<br>6 beds for Europeans) |
| ✓ Serowe " " | 269 | (24 beds for Natives,<br>4 beds for Europeans) |
| Francistown Government huts | 30 | |

610

| | | |
|---|---|---|
| Kanye Mission Hospital | 136 | (12 beds for Natives) |
| Molepolole Mission Hospital | 47 | (6 beds for Natives) |
| Mochudi Mission Hospital | 38 | (12 beds for Natives) |

The total number of deaths among Inpatients was 46.

50. During the year 86 major operations were performed and 353 minor operations, an analysis of which is contained in Appendix 11.

51. As was pointed out in last year's Annual Report the need for the establishment of properly equipped Cottage Hospitals at Francistown and Maun is pressing; both of these Stations are so far distant from existing Hospitals that transportation of patients to them is out of the question, except for such Europeans in the Tati District (Francistown) who can afford to go to the Bulawayo Hospital in Southern Rhodesia. Here again, lack of funds has prevented anything concrete being put into action.

52. Hospital Additional Buildings. In the report for 1932 mention was made of certain additional buildings having been completed during that year at Lobatsi, viz: Isolation wards, adequate accommodation for European and Native Nursing Staffs, and shelters to accommodate Syphilitics and others attending the Dispensary but who are not suitable for admission to Hospital.

53. During the course of 1933 similar additional buildings were completed and equipped at Serowe. The Medical Officers report that at both stations these additions have met the want that was apparent from the time these Hospitals first began to function.

54. £4,000 was loaned to the Administration by the Colonial Development Fund for these additions - that amount being the estimated cost had the buildings been erected in the ordinary way by contract. But as an experiment the work was

done departmentally by the Medical Department with native skilled and unskilled labour under the supervision of the Superintending Clerk of Works loaned from the Public Works Department. In this way the buildings were completed and equipped for £3,500, being a saving of 12½% on what they would have cost had the work been given out to contract.

55. The Doctor in charge of the United Free Church of Scotland Mission last year embarked on the erection of an up-to-date and fully equipped Hospital at Molepolole to accommodate 20 native patients. As soon as the squad of native carpenters and builders had finished at the Serowe Government Hospital they went on to Molepolole where - under the supervision of the Government Superintending Clerk of Works, seconded by Government to the Mission to help in this work which is for the benefit of the Bakwena Tribe - excellent progress in the construction is being made and the buildings should be completed by the middle of 1934.

56. Medical Missions. Reference has been made in previous Reports to the valuable work that is being rendered to the natives of the Protectorate by the Medical Missions working in the Territory - the Seventh Day Adventist Mission at Kanye, the Dutch Reformed Church Mission at Mochudi. and the United Free Church of Scotland Mission at Molepolole. As well as the Welfare Centre at Serowe, which is under the aegis of the London Missionary Society, the Roman Catholic Mission have a trained European Sister working on their station at Khale, and so also the Lutheran Mission at Ramoutsa.

57. References which have been made in several paragraphs of this Report to the work of these Medical Missionaries (most of them subsidised by Government) show the cordial co-operation that exists between these Doctors and the Government Medical Department. The results of this co-operation

have been so very satisfactory that the present policy of the Administration is to encourage the expansion of Medical Missions and to give them such financial assistance in the way of subsidies as Government can afford provided, of course, that the Missions station their Doctors at places where medical facilities are inadequate, and not simple to win converts to their particular denomination. Now the Southern Protectorate (except the Kgalagadi District) is fairly well provided for, but the Northern Protectorate, Kalahari and Ngamiland, including the Ghanzi District, are still very badly served.

## SECTION V - PRISONS AND ASYLUMS.

58. Gaols. The Gaols in the Territory, with the exception of the one at Maun, are as satisfactory as the finances of the Territory will allow, and the cells have sufficient cubic capacity for the average number of prisoners under detention It is only on rare occasions when there is a temporary influx of short-sentence prisoners that over-crowding takes place. Structural improvements were made last year at the Serowe Gaol in the way of an additional cell, paving the court yard, and reasonable facilities for cooking under hygienic conditions.

59. The Gaol at Maun is far from satisfactory. It is a primitive building, the walls of which are mostly of timber and plaster - which form excellent breeding places for bugs. It is so small that there is a chronic state of overcrowding and is generally thoroughly unhygienic. When funds are available a new structure should be erected of such material that it could be maintained bug-free and hygienic.

60. Prisoners' rations are satisfactory both in quantity and quality. Medical Officers report that during last year

prisoners looked infinitely healthier and better nourished that the average native inhabitant, and the fact that not a single prisoner developed scurvy testifies to the good balance of the rations. Where the water supplies permitted gaol vegetable gardens were instituted and these vegetables were additional to the regular diet scale.

61. The Medical Officers accompany the District Magistrates in making a weekly visit of inspection to their respective gaols and prisoners.

62. Asylums. For financial reasons it has not yet been possible to contemplate the erection of an Asylum for insane persons. Such lunatics as are a source of danger to others and to themselves are, by arrangement with the Union of South Africa, transferred to Mental Institutions in the Union. This administration pays for their maintenance at the rate of £40 per annum per person.

63. At present there are 11 lunatics belonging to this Territory in Union Asylums. Insane people who are not dangerous are cared for by their own people, but occasionally this cannot be done so they are kept under the supervision of the Medical Officer at one or other of the Government Gaols. This is not a satisfactory arrangement either for the insane persons or for the prisoners. When funds are available it is strongly recommended that provision should be made to erect in the Territory a small Institution for the care of those lunatics who are not dangerous but who are merely destructive to property and are a public nuisance, the dangerous ones being sent to the Union Institutions as is being done at present. This could best be established at Gaberones where there is a large Government Reserve, and by making arrangements to have it run in conjunction with, but at some distance from the Gaol, the expense should be very moderate.

H.W. Dyke.
Principal Medical Officer.

## APPENDIX I.

## OUTPATIENTS FOR THE YEAR, 1933.

### DISPENSARIES.

| Diseases by Systems or Groups. | Nos. | Principal Diseases. | Nos. |
|---|---|---|---|
| I. **EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.** | 11,310 | 2. Foot and Mouth Disease. | 2 |
| | | 3. Tickbite Fever | 2 |
| | | 5. Malaria: | |
| | | (a) Tertian. | 587 |
| | | 658 (d) Cachexia | 67 |
| | | (d) Blackwater Fever. | 4 |
| | | 6. Smallpox: | |
| | | Alastrim | 4 |
| | | 7. Measles. | 30 |
| | | 9. Whooping Cough | 120 |
| | | 11. Influenza | 197 |
| | | 13. Mumps | 4 |
| | | 15. Epidemic Diarrhoea | 8 |
| | | 16. Dysentery· | |
| | | (a) Amoebic | 178 |
| | | 261 (b) Bacillary | 47 |
| | | (c) Undefined or due to other causes | 36 |
| | | 20. Leprosy. | 7 |
| | | 21. Erysipelas | 16 |
| | | 22. Acute Poliomyelitis | 3 |
| | | 24. Epidemic Cerebro-spinal Fever. | 2 |
| | | 25. Other epidemic diseases: | |
| | | (b) Varicella (Chicken-pox). | 10 |
| | | (g) Yaws | 86 |
| | | 27. Anthrax | 1 |
| | | 31. Tuberculosis, Pulmorary and Laryngeal | 233 |
| | | 32. Tuberculosis of the Meninges or Central Nervous System. | 1 |
| | | 33. Tuberculosis of the Intestines or Peritoneum | 3 |
| | | 346 34. Tuberculosis of the Vertebral Column | 20 |
| | | 35. Tuberculosis of Bones and Joints | 8 |
| | | 36. Tuberculosis of other Organs: | |
| | | (b) Bones. | 7 |
| | | (c) Lymphatic System. | 72 |
| | | 37. Tuberculosis Disseminated: | |
| | | (b) Chronic | 2 |
| | | 38. Syphilis: | |
| | | (a) Primary | 8 |
| | | (b) Secondary | 822 |
| | | 9143 (c) Tertiary | 3,697 |
| | | (d) Hereditary | 180 |
| | | (e) Period not indicated | 4,436 |
| | | 39. Soft Chancre. | 1 |
| Carried forward | 11,310 | | 10,901 |

| Diseases by Systems or Groups. | Nos. | Principal Diseases. | Nos. |
|---|---|---|---|
| Brought forward | 11,310 | | 10,901 |
| I. EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES, (Contd). | | 9143<br>40. A. Gonorrhoea and its Complications. . . | 376 |
| | | 409<br>B. Gonorrhoeal Ophthalmia . | 5 |
| | | C. Gonorrhoeal Arthritis . . | 12 |
| | | 9563<br>D. Granuloma Venereum . . | 16 |
| II. GENERAL DISEASES not mentioned above. | 1,283 | 44. Cancer or other malignant Tumours of the Stomach or liver. . . . . | 3 |
| | | 45. Cancer or other malignant Tumours of the Peritoneum . Intestines, Rectum . | 2 |
| | | 46. Cancer or other malignant Tumours of the Female Genital Organs. . . . . | 2 |
| | | 48. Cancer or other malignant Tumours of the skin. . . | 2 |
| | | 50. Tumours, non-malignant. . . | 80 |
| | | 51. Acute Rheumatism. . . . | 46 |
| | | 52. Chronic Rheumatism. . . | 823 |
| | | 53. Scurvy (including Barlow's Disease). . . . . | 268 |
| | | 54. Pellagra . . . . . . | 1 |
| | | 57. Diabetes (not including Insipidus) . . . . | 2 |
| | | 58. Anaemia . . . . . | 6 |
| | | (b) Other anaemias and Chlorosis. | 37 |
| | | 60. Diseases of the Thyroid Gland:<br>(b) Other Diseases of the Thyroid Gland, Myxoedema. | 3 |
| | | 66. Alcoholism. . . . . | 1 |
| | | 68. Chronic poisoning by organic substances (Morphia, Cocaine, etc.) . . . . . | 1 |
| | | 69. Other General Diseases:<br>Auto-Intoxication . . . | 1 |
| | | Purpura Haemorrhagica . . | 5 |
| III. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES. | 1,139 | 72. Locomotor Ataxia | 3 |
| | | 73. Other Affections of the Spinal Cord . . . . . | 1 |
| | | 74. Apoplexy:<br>(a) Haemorrhage . . . | 5 |
| | | (b) Embolism . . . . | 1 |
| | | (c) Thrombosis . . . | 1 |
| | | 75. Paralysis:<br>(a) Hemiplegia . . . | 3 |
| | | (b) Other Paralyses . . | 12 |
| | | 77. Other Forms of Mental Alienation | 13 |
| | | 78. Epilepsy . . . . . | 18 |
| | | 79. Eclampsia, Convulsions (non-Puerperal) 5 years or over . | 2 |
| | | 81. Chorea. . . . . . | 6 |
| | | 82. A. Hysteria . . . . | 5 |
| | | B. Neuritis . . . . | 61 |
| | | C. Neurasthenia. . . . | 9 |
| | | 84. Other Affections of the Nervous System, Paralysis Agitans. . | 1 |
| Carried forward | 13,732 | | 12,724 |

| Diseases by Systems or Groups. | Nos. | Principal Diseases. | Nos. |
|---|---|---|---|
| Brought forward | 13,732 | | 12,724 |
| I. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES. (Contd). | | 85. Affections of the Organs of Vision: | |
| | | (a) Diseases of the Eye | 64 |
| | | (b) Conjunctivitis | 595 |
| | | (c) Trachoma. | 40 |
| | | (d) Tumours of the Eye. | 1 |
| | | (e) Other affections of the Eye | 98 |
| | | 86. Affections of the Ear or Mastoid Sinus | 210 |
| . AFFECTIONS OF THE CIRCULATORY SYSTEM. | 287 | 88. Acute Endocarditis or Myocarditis | 2 |
| | | 90. Other Diseases of the Heart: | |
| | | (a) Valvular - | |
| | | Mitral. | 88 |
| | | Aortic. | 38 |
| | | (b) Myocarditis | 76 |
| | | 91. Diseases of the Arteries: | |
| | | (a) Aneurism. | 2 |
| | | (b) Arterio-Sclerosis | 4 |
| | | 93. Diseases of the Veins: | |
| | | Haemorrhoids. | 28 |
| | | Varicose Veins | 8 |
| | | 94. Diseases of the Lymphatic System: | |
| | | Lymphangitis. | 5 |
| | | Lymphadenitis, Bubo (non-specific) | 20 |
| | | 95. Haemorrhage of undertermined cause | 14 |
| | | 96. Other Affections of the Circulatory System | 2 |
| . AFFECTIONS OF THE RESPIRATORY SYSTEM. | 1,671 | 97. Diseases of the Nasal Passages: | |
| | | Adenoids | 11 |
| | | Polypus | 3 |
| | | Rhinitis | 9 |
| | | Coryza. | 109 |
| | | 98. Affections of the Larynx: | |
| | | Laryngitis | 66 |
| | | 99. Bronchitis: | |
| | | (a) Acute | 825 |
| | | (b) Chronic | 339 |
| | | 100. Broncho-Pneumonia | 19 |
| | | 101. Pneumonia: | |
| | | (a) Lobat | 36 |
| | | (b) Unclassified | 8 |
| | | 102. Pleurisy, Empyema | 30 |
| | | 105. Asthma | 29 |
| | | 106. Pulmonary, Emphysema | 1 |
| | | 107. Other Affections of the Lungs: | |
| | | Bronchial Catarrh. | 186 |
| Carried forward | 15,690 | | 15,690 |

| Diseases by Systems or Groups. | Nos. | Principal Diseases. | Nos. |
|---|---|---|---|
| Brought forward | 15,690 | | 15,690 |
| VI. DISEASES OF THE DIGESTIVE SYSTEM. | 4,088 | 108.A. Diseases of Teeth or Gums: | |
| | | Caries, Pyorrhoea, etc. | 1,083 |
| | | B. Other Affections of the Mouth: | |
| | | Stomatitis. . . . | 55 |
| | | Glossitis, etc. | 4 |
| | | 109.Affections of the Pharynx or Tonsils: | |
| | | Tonsillitis . . . | 264 |
| | | Pharyngitis . . . | 43 |
| | | 111.A. Ulcer of the Stomach . | 2 |
| | | B. Ulcer of the Duodenum . | 1 |
| | | 112.Other Affections of the Stomach: | |
| | | Gastritis . . . . | 66 |
| | | Dyspepsia, etc . . . | 729 |
| | | 113.Diarrhoea and Enteritis: | |
| | | Under two years. . . | 195 |
| | | 114.Diarrhoea and Enteritis: | |
| | | Two years and over . . | 156 |
| | | Colitis. . . . . | 6 |
| | | 116.Diseases due to Intestinal Parasites: | |
| | | (a) Cestoda (Taenia). . | 27 |
| | | (c) Nematoda (other than Ankylostoma) . . | 2 |
| | | Ascaris . . . | 7 |
| | | Oxyuris . . . | 7 |
| | | 117.Appendicitis. . . . | 31 |
| | | 118.Hernia . . . . . | 21 |
| | | 119.A. Affections of the Anus, Fistula, etc . . . | 32 |
| | | B. Other affections of the Intestines: | |
| | | Enteroptosis . . . | 3 |
| | | Constipation . . . | 1,325 |
| | | 122.Cirrhosis of the Liver | |
| | | (a) Alcoholic . . . | 10 |
| | | 123.Biliary Calculus . . . | 3 |
| | | 124.Other Affections of the Liver: | |
| | | Hepatitis . . . . | 8 |
| | | Cholecystitis . . . | 2 |
| | | Jaundice . . . . | 1 |
| | | 127.Other Affections of the Dijestive System . . . | 5 |
| VII. DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL). | 926 | 128.Acute Nephritis . . . | 12 |
| | | 129.Chronic . . . . | 11 |
| | √ | 130.B. Schistosomiasis . . | 101 |
| | | 131.Other Affections of the Kidneys: | |
| | | Pyelitis, etc. | 22 |
| | | 133.Diseases of the Bladder: | |
| | | Cystitis . . . . | 75 |
| | | 134.Diseases of the Urethra: | |
| | | (a) Stricture . . . | 11 |
| | | (b) Other. . . . | 4 |
| | | 135.Diseases of the Prostate: | |
| | | Hypertrophy | 1 |
| | | Prostatitis . . . | 21 |
| Carried forward | 20,704 | | 20,036 |

| Diseases by Systems or Groups. | Nos. | Principal Diseases. | Nos. |
|---|---|---|---|
| Brought forward | 20,704 | | 20,036 |
| VII. DISEASES OF THE GENITO URINARY SYSTEM (NON VENEREAL) (Contd) | | 136. Diseases (non-Venereal) of the Genital Organs of Man : | |
| | | Orchitis | 21 |
| | | Hydrocele | 4 |
| | | 137. Cysts or other non-malignant Tumours of the Ovaries. | 17 |
| | | 138. Salpingitis: | 54 |
| | | Abscess of the Pelvis | 4 |
| | | 139. Uterine Tumours (non-malignant) | 10 |
| | | 140. Uterine Haemorrhage (non-puerperal) | 19 |
| | | 141. A. Metritis | 7 |
| | | B. Other affections of the Female Genital Organs : | |
| | | Displacements of Uterus | 152 |
| | | Amenorrhoea. | 103 |
| | | Dysmenorrhoea | 165 |
| | | Leucorrhoea | 93 |
| | | 142. Diseases of the Breast (non-puerperal) : | |
| | | Mastitis | 16 |
| | | Abscess of Breast | 3 |
| VIII. PUERPERAL STATE | 117 | 143. A. Normal Labour. | 32 |
| | | B. Accidents of Pregnancy: | |
| | | (a) Abortion | 18 |
| | | (b) Ectopic Gestation | 2 |
| | | (c) Other accidents of Pregnancy | 37 |
| | | 144. Puerperal Haemorrhage. | 4 |
| | | 145. Other Accidents of Parturition | 2 |
| | | 146. Puerperal Septicaemia. | 8 |
| | | 149. Sequelae of Labour | 8 |
| | | 150. Puerperal Affections of the Breast | 6 |
| IX. AFFECTIONS OF THE SKIN AND CELLULAR TISSUES. | 579 | 151. Gangrene | 1 |
| | | 152. Boil: | 18 |
| | | Carbuncle | 27 |
| | | 153. Abscess: | 29 |
| | | Whitlow | 53 |
| | | Cellulitis | 19 |
| | | 154. A. Tinea | 44 |
| | | B. Scabies | 18 |
| | | 155. Other Diseases of the Skin: | |
| | | Urticaria | 125 |
| | | Eczema | 227 |
| | | Herpes | 10 |
| | | Psoriasis | 8 |
| X. DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS) | 87 | 156. Diseases of Bones: | |
| | | Osteitis | 5 |
| | | 157. Diseases of Joints: | |
| | | Arthritis | 34 |
| | | Synovitis | 22 |
| | | 158. Other Diseases of Bones or Organs of Locomotion | 26 |
| Carried forward | 21,487 | | 21,487 |

| Diseases by Systems or Groups. | Nos. | Principal Diseases. | Nos. |
|---|---|---|---|
| Brought forward | 21,487 | | 21,487 |
| XI. MALFORMATIONS. | - | | |
| XII. DISEASES OF INFANCY | 62 | 161. Premature Birth. . . . | 2 |
| | | 162. Other Affections of Infancy | 43 |
| | | 163. Infant neglect (infants of three months or over) . . | 17 |
| XIII. AFFECTIONS OF OLD AGE. | 11 | 164. Senility: | |
| | | Senile Dementia . . . | 11 |
| XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES. | 929 | 176. Attacks of poisonous animals: | |
| | | Snake Bite . . . . | 6 |
| | | Insect Bite . . . . | 39 |
| | | 177. Other Accidental Poisonings . | 2 |
| | | 178. Burns (by Fire) . . . . | 109 |
| | | 179. Burns (other than by Fire). . | 56 |
| | | 182. Drowning (accidental) . . . | 1 |
| | | 183. Wounds (by Firearms, war excepted) . . . . . . | 1 |
| | | 184. Wounds (by cutting or stabbing instruments) . . . . . | 363 |
| | | 185. Wounds (by Fall) . . . . | 51 |
| | | 186. Wounds (in Mines or Quarries) | 14 |
| | | 187. Wounds (by Machinery) . . . | 5 |
| | | 188. Wounds (crushing, e.g. railway accidents) . . . . . | 39 |
| | | 189. Injuries inflicted by animals, Bites, Kicks, etc . . . . | 28 |
| | | 192. B. Hunger or Thirst . . . | 1 |
| | | 195. Lightning Stroke . . . . | 2 |
| | | 198. Murder by Cutting or Stabbing Instruments . . . . . | 3 |
| | | 199. Murder by other means . . . | 1 |
| | | 201. A. Dislocation . . . . | 4 |
| | | B. Sprain . . . . . | 29 |
| | | C. Fracture . . . . . | 24 |
| | | 202. Other External Injuries . . | 151 |
| XV. ILL-DEFINED DISEASES. | 246 | 205 A. Diseases not already specified or ill-defined: | |
| | | Ascites . . . . . | 6 |
| | | Oedema . . . . . | 4 |
| | | Asthenia . . . . . | 222 |
| | | B. Malingering . . . . . | 14 |
| XVI. DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED 10 DEATHS. | 80 | | 80 |
| Total | 22,815 | | 22,815 |

# APPENDIX II.

## Return of Diseases and Deaths - In-patients - for the year 1933.

| Diseases | Remaining in Hospital 1933. | Yearly Total |  | Total cases treated. | Remaining in Hospital 1934. |
|---|---|---|---|---|---|
|  |  | Admissions | Deaths |  |  |
| **1. EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.** |  |  |  |  |  |
| 1. Enteric Group: |  |  |  |  |  |
| (a) Typhoid Fever . . | - | 1 | 1 | 1 | - |
| 3. Tickbite Fever . . | - | 2 | - | 2 | - |
| 5. Malaria: |  |  |  |  |  |
| ✓ (a) Tertian . . . | 1 | 10 | - | 11 | - |
| 9. Whooping Cough . . . | - | 2 | 1 | 2 | 1 |
| 11. Influenza . . . | - | 17 | - | 17 | - |
| 16. Dysentery |  |  |  |  |  |
| ✓ (a) Amoebic . . . | - | 16 | 4 | 16 | - |
| 25. Other Epidemic Diseases |  |  |  |  |  |
| (g) Yaws . . . . | - | 2 | - | 2 | - |
| 27. Anthrax . . . . | - | 1 | - | 1 | - |
| 29. Tetanus . . . . | - | 2 | 1 | 2 | - |
| 31. Tuberculosis, Pulmonary and Laryngeal . . . . | - | 13 | 5 | 13 ✓ | - |
| 33. Tuberculosis of the Intestines or Peritoneum . . . | - | 2 | 1 | 2 | - |
| 34. Tuberculosis of the Vertebral Column . . . . | - | 3 | - | 3 | - |
| 35. Tuberculosis of Bones and Joints . . . . | 2 | 3 | 1 | 5 | - |
| 36. Tuberculosis of other Organs: |  |  |  |  |  |
| (b) Bones . . . . | - | 2 | - | 2 | - |
| (c) Lymphatic System . . | 1 | 15 | 1 | 16 | 3 |
| 37. Tuberculosis disseminated: |  |  |  |  |  |
| (a) Acute . . . . | - | 3 | 2 | 3 | - |
| (b) Chronic . . . . | 1 | - | - | 1 | - |
|  |  |  |  | 45 ✓ |  |
| 38. Syphilis: |  |  |  |  |  |
| (a) Primary . . . . | - | 2 | - | 2 | - |
| (b) Secondary. . . . | - | 6 | - | 6 | 3 |
| (c) Tertiary . . . . | 3 | 28 | 2 | 31 | 3 |
| (d) Hereditary . . . | - | 4 | - | 4 | - |
| (e) Period not indicated . | - | 12 | - | 12 55 | - |
| 39. Soft Chancre . . . | - | 3 | 1 | 3 3 | - |
| 40. A. Gonorrhoea and its complications . . . | 1 | 10 | 1 | 11 | 1 |
| B. Gonorrhoeal Ophthalmia | - | 3 | - | 3 14 | - |
|  |  |  |  | 72 |  |
| **11. GENERAL DISEASES NOT MENTIONED ABOVE.** |  |  |  |  |  |
| 44. Cancer or other malignant tumours of the Stomach or Liver . . . . | - | 1 | - | 1 | - |
| 46. Cancer or other malignant tumours of the Female genital organs . . . . . | - | 1 | 1 | 1 | - |
| Carried forward | 9 | 164 | 22 | 173 | 11 |

| Diseases | Remaining in Hospital 1933. | Yearly Total | | Total cases treated | Remaining in Hospital 1934. |
|---|---|---|---|---|---|
| | | Admissions | Deaths | | |
| Brought forward | 9 | 164 | 22 | 173 | 11 |
| 11. GENERAL DISEASES NOT MENTIONED ABOVE. (Contd.) | | | | | |
| 50. Tumours, non-malignant . | - | 8 | - | 8 | - |
| 51. Acute Rheumatism . . | - | 3 | - | 3 | 1 |
| 52. Chronic Rheumatism . | - | 33 | - | 33 | 1 |
| 53. Scurvy (including Barlow's Disease) . . . | - | 16 | 2 | 16 | 5 |
| 57. Diabetes (not including Insipidus) . . . | - | 1 | - | 1 | - |
| 58. Anaemia: | | | | | |
| (b) Other Anaemias and Chlorosis . . | - | 4 | - | 4 | 1 |
| 60. Other Diseases of the Thyroid Gland, Myxoedema | - | 1 | - | 1 | - |
| 66. Alcoholism . , . | - | 2 | - | 2 | - |
| 69. Other Genereal Diseases: Auto-Intoxication . . | - | 1 | - | 1 | - |
| 111.AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES. | | | | | |
| 74. Apoplexy: | | | | | |
| (a) Haemorrhage . . | - | 1 | 1 | 1 | - |
| (c) Thrombosis . . | - | 1 | - | 1 | - |
| 75. Other Paralyses: | | | | | |
| (b) Other Paralyses . | - | 2 | - | 2 | - |
| 77. Other Forms of Mental Alienation . . . | - | 1 | - | 1 | - |
| 78. Epilepsy . . . | - | 3 | - | 3 | - |
| 79. Eclampsia, Convulsions (non-puerperal) 5 years or over. | - | 1 | - | 1 | - |
| 80. Infantile Convulsions . | - | 1 | 1 | 1 | - |
| 81. Chorea . . . | - | 1 | - | 1 | - |
| 82. A. Hysteria . . . | - | 3 | - | 3 | - |
| B. Neuritis . . . | - | 1 | - | 1 | - |
| C. Neurasthenia . . | 2 | - | - | 2 | - |
| 83. Cerebral Softening . . | - | 5 | - | 5 | - |
| 84. Other Affections of the Nervous System, such as Paralysis Agitans . . | - | 1 | - | 1 | - |
| 85. Affections of the Organs of Vision: | | | | | |
| (a) Diseases of the Eye | - | 5 | - | 5 | - |
| (b) Conjunctivitis . . | 1 | 4 | - | 5 | - |
| (c) Trachoma . . . | - | 1 | - | 1 | - |
| (e) Other Affections of the eye: (Cataract Extractions) . . | - | 11 | - | 11 | 2 |
| Carried forward | 12 | 275 | 26 | 287 | 21 |

| Diseases. | Remaining in Hospital 1933 | Yearly Total | | Total cases treated | Remaining in Hospital 1934. |
|---|---|---|---|---|---|
| | | Admissions | Deaths | | |
| Brought forward | 12 | 275 | 26 | 287 | 21 |
| IV. AFFECTIONS OF THE CIRCULATORY SYSTEM. | | | | | |
| 88. Acute Endocarditis or Myocarditis. . . . | 1 | - | - | 1 | - |
| 90. Other Diseases of the Heart : | | | | | |
| (a) Mitral . . . . | - | 2 | - | 2 | - |
| (b) Myocarditis . . . | - | 3 | - | 3 | - |
| 91. Diseases of the Arteries: | | | | | |
| (b) Arterio-Sclerosis. . | - | 1 | - | 1 | - |
| 93. Diseases of the Veins: | | | | | |
| Haemorrhoids . . . . | - | 1 | - | 1 | - |
| Varicose Veins . . . | - | 2 | - | 2 | - |
| 95. Haemorrhage of undetermined cause. . . . . | - | 1 | - | 1 | - |
| V. AFFECTIONS OF THE RESPIRATORY SYSTEM. | | | | | |
| 97. Diseases of the Nasal Passages: | | | | | |
| Adenoids. . . . . | - | 3 | - | 3 | - |
| Polypus . . . . | - | 1 | - | 1 | - |
| 98. Affections of the Larynx: | | | | | |
| Laryngitis . . . | - | 2 | - | 2 | - |
| 99. Bronchitis: | | | | | |
| (a) Acute . . . . | - | 9 | - | 9 | - |
| (b) Chronic . . . | - | 4 | - | 4 | - |
| 100. Broncho-Pneumonia . . | - | 3 | 1 | 3 | - |
| 101. Pneumonia: | | | | | |
| (a) Lobar. . . . | - | 14 | - | 14 | - |
| (b) Unclassified . . | - | 2 | - | 2 | - |
| 102. Pleurisy, Empyema . . | 1 | 4 | - | 5 | - |
| 105. Asthma. . . . . . | - | 3 | - | 3 | 1 |
| 106. Pulmonary Emphysema . . | - | 1 | - | 1 | 1 |
| VI. DISEASES OF THE DIGESTIVE SYSTEM. | | | | | |
| 108.A. Diseases of Teeth or Gums: Caries, Pyorrhoea, etc. | - | 5 | - | 5 | - |
| 109. Affections of the Pharynx or Tonsils. . . . . | 1 | 37 | - | 38 | 1 |
| 111.A. Ulcer of the Stomach . | - | 3 | - | 3 | - |
| 112. Other affections of the Stomach: | | | | | |
| Gastritis . . . . . | - | 3 | - | 3 | 1 |
| Dyspepsia, etc. . . . | - | 4 | - | 4 | - |
| 113. Diarrhoea and Enteritis: Under two years . . . | - | 8 | - | 8 | 2 |
| 114. Diarrhoea and Enteritis: Two years and over . . | - | 9 | 1 | 9 | 2 |
| Carried forward . . | 15 | 400 | 28 | 415 | 29 |

| Diseases. | Remaining in Hospital 1933 | Yearly Total. | | Total Cases Treated | Remaining in Hospital 1934 |
|---|---|---|---|---|---|
| | | Admissions | Deaths | | |
| Brought forward | 15 | 400 | 28 | 415 | 29 |
| VI. DISEASES OF THE DIGESTIVE SYSTEM (Continued) | | | | | |
| Colitis. | - | 3 | - | 3 | - |
| 116. Diseases due to Intestinal Parasites: | | | | | |
| (a) Cestoda (Taenia) | - | 3 | - | 3 | - |
| 117. Appendicitis | 1 | 16 | - | 17 | 1 |
| 119.A. Affections of the Anus, Fistula, etc. | - | 5 | 1 | 5 | - |
| B. Other Affections of the Intestines: | | | | | |
| Enteroptosis | - | 2 | - | 2 | - |
| Constipation | - | 9 | - | 9 | - |
| 120. Acute Yellow Atrophy of the Liver. | - | 1 | 1 | 1 | - |
| 122. Cirrhosis of the Liver: | | | | | |
| (a) Alcoholic | - | 2 | - | 2 | 1 |
| (b) Other Forms | - | 1 | - | 1 | - |
| 123. Biliary Calculus | - | 1 | - | 1 | - |
| 124. Other Affections of the Liver: | | | | | |
| Abscess. | - | 1 | - | 1 | - |
| Hepatitis | - | 1 | - | 1 | - |
| Cholecystitis. | - | 1 | - | 1 | - |
| 127. Other Affections of the Digestive System. | - | 7 | 2 | 7 | 1 |
| VII. DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL). | | | | | |
| 128. Acute Nephritis | 1 | 3 | - | 4 | - |
| 129. Chronic | - | 4 | 1 | 4 | 1 |
| 130.B. Schistosomiasis | - | 2 | - | 2 | - |
| 132. Urinary Calculus | - | 3 | - | 3 | - |
| 133. Diseases of the Bladder: | | | | | |
| Cystitis | 1 | 4 | - | 5 | - |
| 134. Diseases of the Urethra: | | | | | |
| (a) Stricture | - | 2 | - | 2 | - |
| 135. Diseases of the Prostate: | | | | | |
| Hypertrophy. | - | 1 | - | 1 | 1 |
| Prostatitis. | - | 2 | - | 2 | - |
| 136. Diseases (Non-Venereal) of the Genital Organs of Man: | | | | | |
| Orchitis. | - | 2 | - | 2 | - |
| Hydrocele | - | 1 | - | 1 | - |
| 137. Cysts or other non-malignant Tumours of the Ovaries | - | 3 | - | 3 | - |
| 138. Salpingitis: | - | 18 | - | 18 | 3 |
| 139. Uterine Tumours (non-malignant) | - | 2 | - | 2 | - |
| 141.A. Metritis | - | 8 | - | 8 | - |
| B. Other Affections of the Female Genital Organs: | | | | | |
| Displacements of Uterus. | - | 23 | - | 23 | - |
| Dysmenorrhoea | - | 19 | - | 19 | - |
| Leucorrhoea. | - | 6 | - | 6 | - |
| 142. Diseases of the breast (non-puerperal): | | | | | |
| Mastitis. | - | 1 | - | 1 | - |
| Abscess of the breast | - | 3 | - | 3 | - |
| Carried forward | 18 | 560 | 33 | 578 | 37 |

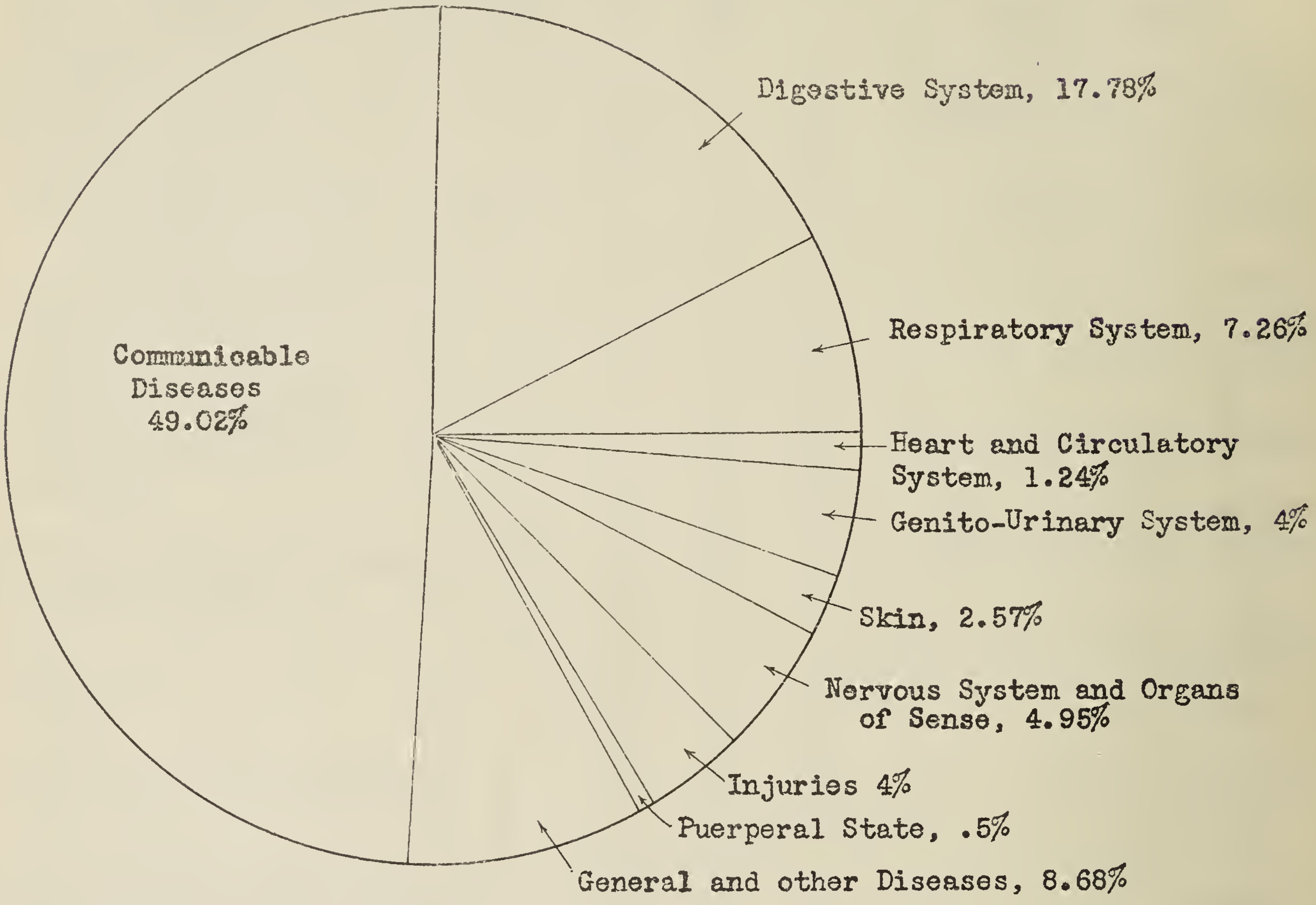
| Diseases. | Remaining in Hospital 1933 | Yearly Total. | | Total Cases Treated | Remaining in Hospital 1934 |
|---|---|---|---|---|---|
| | | Admissions | Deaths | | |
| Brought forward | 18 | 560 | 33 | 578 | 37 |
| VIII PUERPERAL STATE. | | | | | |
| 143. A. Normal Labour. | - | 2 | - | 2 | - |
| B. Accidents of Pregnancy: | | | | | |
| (a) Abortion | - | 10 | - | 10 | - |
| (b) Ectopic Gestation | - | 2 | - | 2 | - |
| (c) Other accidents of Pregnancy | - | 3 | - | 3 | - |
| 144. Puerperal Haemorrhage | - | 2 | - | 2 | - |
| 145. Other accidents of Parturition | - | 8 | - | 8 | - |
| 146. Puerperal Septicaemia | - | 5 | 1 | 5 | 1 |
| 149. Sequelae of Labour | - | 5 | - | 5 | 2 |
| 150. Puerperal Affections of the Breast | - | 1 | - | 1 | - |
| IX. AFFECTIONS OF THE SKIN AND CELLULAR TISSUES. | | | | | |
| 152. Boil | - | 2 | - | 2 | - |
| Carbuncle | 1 | - | - | 1 | - |
| 153. Abscess: | - | 5 | - | 5 | 1 |
| 154.A Tinea | - | 4 | - | 4 | - |
| 155. Other Diseases of the Skin: Eczema | - | 1 | - | 1 | - |
| X. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS). | | | | | |
| 156. Diseases of Bones: Osteitis | 1 | 7 | - | 8 | 3 |
| 157. Diseases of Joints: | | | | | |
| Arthritis | - | 5 | - | 5 | - |
| Synovitis | - | 2 | - | 2 | - |
| 158. Other Diseases of Bones or Organs of Locomotion | - | 1 | - | 1 | - |
| XI. MALFORMATIONS. | | | | | |
| 159. Malformations: Hydrocephalus | 1 | 1 | - | 2 | - |
| XII DISEASES OF INFANCY | | | | | |
| 162. Other Affections of Infancy. | - | 1 | - | 1 | - |
| XIII. AFFECTIONS OF OLD AGE. | | | | | |
| 164. Senility: Senile Dementia | - | 1 | - | 1 | - |
| XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES. | | | | | |
| 176. Attacks of poisonous animals: | | | | | |
| Snakebite. | - | 2 | - | 2 | - |
| Insect Bite | - | 1 | - | 1 | - |
| 177. Other Accidental Poisonings | - | 1 | - | 1 | 1 |
| 178. Burns (by Fire) | - | 1 | - | 1 | - |
| 179. Burns (other than by Fire) | - | 10 | 4 | 10 | 1 |
| 183. Wounds (by Firearms, War excepted) | 3 | 4 | 1 | 7 | - |
| Carried forward | 24 | 647 | 39 | 671 | 46 |

| Diseases. | Remaining in Hospital 1933 | Yearly Total | | Total Cases treated | Remaining in Hospital 1934. |
|---|---|---|---|---|---|
| | | Admissions | Deaths | | |
| Brought forward | 24 | 647 | 39 | 671 | 46 |
| XIV. AFFECTIONS PRODUCED BY EXTERNAL CAUSES (Contd) | | | | | |
| 184. Wounds (by cutting or stabbing instruments) . | - | 35 | 1 | 35 | 1 |
| 185. Wounds (by fall) . . | - | 6 | 1 | 6 | - |
| 186. Wounds (in Mines or Quarries) . . . | - | 2 | - | 2 | - |
| 187. Wounds (by machinery) . | - | 1 | - | 1 | - |
| 188. Wounds (crushing, e.g. Railway accidents, etc.) | 1 | 13 | - | 14 | - |
| 189. Injuries inflicted by Animals, Bites, Kicks, etc. | - | 11 | - | 11 | 1 |
| 192.B. Hunger or Thirst . | - | 1 | - | 1 | - |
| 194. Exposure to Heat . . | - | 1 | - | 1 | 1 |
| 201.A. Dislocation . . | - | 1 | - | 1 | - |
| B. Sprain . . . | 1 | 2 | - | 3 | 1 |
| C. Fracture . . . | 3 | 20 | 1 | 23 | 2 |
| 202. Other External Injuries | 1 | 15 | 3 | 16 | 1 |
| 203. Deaths by Violence of Unknown cause . . | - | 1 | 1 | 1 | - |
| XV. ILL-DEFINED DISEASES. | | | | | |
| 205.A. Diseases not already specified or ill-defined: Asthenia . . | 1 | 38 | - | 39 | 1 |
| XVI. DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED 10 DEATHS. . . | - | 14 | - | 14 | - |
| TOTAL . | 31 | 808 | 46 | 839 | 54 |

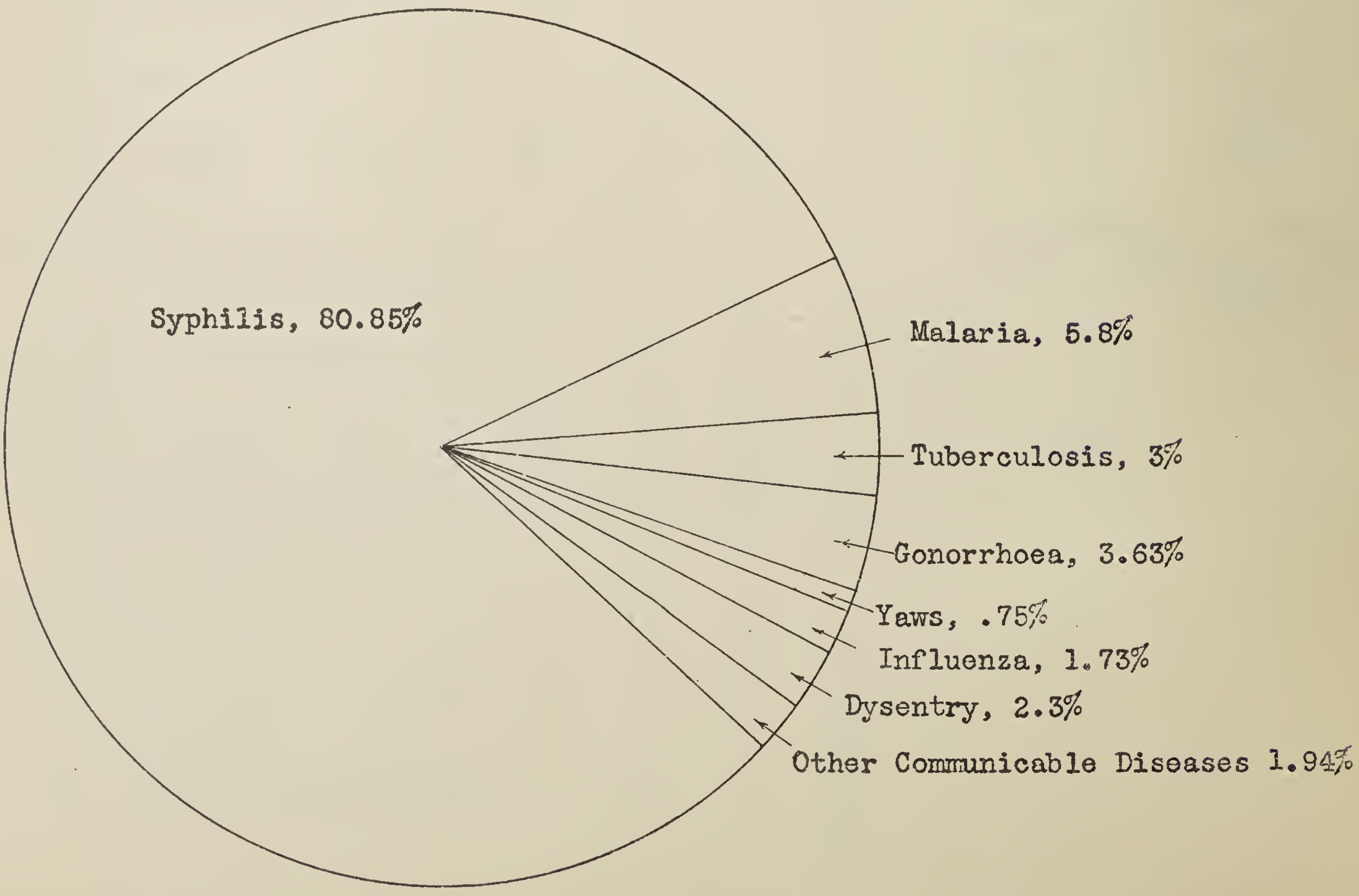
## APPENDIX III.

## Diagrams showing Incidence of Disease. 1933

1. Total first attendances, 22815.



2. Communicable Diseases. Total Incidence - 11.310 1933



# APPENDIX IV.

## Classification of Operations performed in Government Hospitals and Subsidised Mission Hospitals.

### Head and Neck :

| | |
|---|---|
| Cataract extractions | 7 |
| Enucleation of Eye | 4 |
| Excision of Cervical Glands | 5 |
| Tonsillectomy | 18 |

### Thorax and Abdomen :

| | |
|---|---|
| Appendicectomy | 16 |
| Herniotomy | 2 |
| Hysterectomy | 2 |
| Salpingectomy | 11 |
| Ventro-suspension of Uterus | 16 |
| Ovariotomy | 2 |
| Prostatectomy | 1 |
| Lethotomy | 1 |

### Miscellaneous :

| | |
|---|---|
| Amputations | 3 |
| Forceps Delivery | 4 |
| Sequestrotomy | 3 |
| Orchidectomy | 1 |
| Plastic Operations | 4 |
| Excision of Tumour | 8 |
| Excision of Hydrodcele | 1 |
| Urethrotomy | 1 |
| Curettage of Uterus | 21 |
| Other Minor Operations | 226 |

# APPENDIX V.

## WELFARE WORK AT SEROWE.

(Report on First Year, 1933).

This year has been experimental, and extremely interesting and happy. Ante-Natal work and Child Welfare is new to the Bamangwato women - although the road to it was prepared by Miss Gilbert. When first visiting the huts I was shocked at the dirt and squalor; and on the other hand often surprised at the cleanliness and order. Dirt and superstition are my two enemies.

In February I went to the Sekgoma Memorial Hospital for 6 weeks' duty, and again in July for 8 weeks, and found it a great handicap to my work, although I enjoy being in such close contact with the patients and nurses. But I return to my work in the huts with great joy; as I love being in the very heart of Native life.

In March I began teaching Hygiene and Health in both Native schools and much enjoyed it, as the scholars were so keen to learn. Many of them are boys and girls well over 20 years of age, so should have influence later on, although at present they are entirely under the rule of the old people. They will not allow them to kill flies as they say it will bring them disease. I was pleased with the examination results of the Hygiene paper.

Mothercraft classes were started in April, and an average of 45 women attended weekly - but not the women I wanted came. There was an idea that Hygiene is only for Christians! Practical classes on Baby Bathing, Blanket Bathing, Tepid Sponging, Bathing of Eyes, Application of Fomentations and the giving of a mustard bath were given. Talks on Baby Ailments, Baby Feeding, the Care of a Premature Infant (with a living example of a child who weighed 3 lbs. 4 ozs. at 1 month), Care of the expectant Mother, Nursing of the

Lying-in woman, Disinfection of Huts, Sanitation and the necessity for Vaccination were given.

The most popular Branch of the work is the Ante-Natal Clinic which is held each Tuesday in the Arthington Hall. In April it began with one mother and three curious women accompanying her. During the year 143 mothers were seen, many of them every few weeks, and a small number coming once only. Out of the total number there were born in 1933, 34 male infants, among which 9 died during the first month; and 47 female infants were born, of which 3 died during the first two months. Infant mortality is very high, due to Syphilis and wrong feeding. The two Hospital Nurses, Motshabi and Mothoecho, and my district Nurse, Batshabeng, come to the Clinic and are showing interest and skill. The Minister's wife, Mrs.Raditladi, comes each week to learn; and help with the sewing - as the women sew baby garments while waiting to be examined. They buy these when finished at 3d. each.

I am called out to Midwifery cases in the huts, usually to the Mothers of the Ante-Natal class, but sometimes to women who are very heathen and whom I have never seen before. I always jump at these opportunities and try to teach Hygiene individually as there are generally six or eight onlookers - women of all ages from 30 to 80! Batshabeng is a tremendous help in the nursing and on the Evangelistic side. Very often if things are difficult the women ask us to pray with them. It is my custom to have a praise Service and dedicate it to God, even if it is born in a heathen home. There is much joy on this side of the work - also in the naming of the child which falls to my lot. In the 3 months, September to November, I paid 270 visits in the huts, and that means bathing the baby and nursing the mother. I believe Africa can be changed through the women - hence the untold joy of working among the mothers and babies in Serowe.

(Signed) EVELYN HAILE.

# APPENDIX VI.

## MINE RECRUITS.

### Medical Report regarding 500 men consecutively examined.

### Molepolole, Bechuanaland Protectorate; January-May, 1933.

**WEIGHTS:**

Men stripped to waist and minus footwear.

107-119 = 166
120-129 = 172
130-139 = 106
140-149 = 44
150-159 = 11
165 = 1 Total - 500.

**AVERAGE WEIGHT** = 125.88 lbs.

Notes: 275 men or 55% were under 9 stone.

444 men or 88% were under 10 stone.

Only 6 men reached 11 stone.

None reached 12 stone.

The men were of average height.

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**RESULT OF MEDICAL EXAMINATIONS.**

250 men or 50% passed

207 men or 41.4% rejected

43 men or 8.6% doubtful or border-line cases.

Note: Of the 207 men rejected 82 were applicants for the first time. The remaining 125 gave a history of previous service at the Mines.

Average weight of passed = 130.1 lbs.

Average weight of rejected and doubtful = 121.7 lbs.

**MEN WITH HISTORY. OF FREQUENT MINES SERVICE**

90 men gave a history of having been 5 or more times at Mines.

Of those 90 -

44 passed
34 rejected
12 doubtful.

Average weight of passed = 130.6 lbs.

Average weight of rejected and doubtful = 121.4 lbs.

33 men gave a history of having been 8 or more times at Mines.

of those 33 -

10 passed
15 rejected
8 doubtful.

Average weight of passed = 131.3 lbs.

Average weight of rejected and doubtful = 123.6 lbs.

Note: One is satisfied that there is ground for the warning given to Medical Officers by the Native Recruiting Corporation to examine with special care the lungs of those who give a history of repeated Mines Service.

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## RESPONSE TO TREATMENT.

35 of the immediately local men rejected were given free medical treatment in the hope of their being made fit. This did not meet with a ready acceptance in a number of cases; decisions to repeat treatment caused a little resentment as they meant delay in being passed. The health of 9 of those men, so far, has been raised to a pass standard.

## PRIMARY CAUSES OF REJECTION.

Poor Physique = 49
Diseases of Lungs = 66
Diseases of Heart = 19
Diseases of Lungs and Heart = 26
Poor Physique with Heart Condition. = 3
Poor Physique with sl. impair. of Lungs. = 2
Diseases and Defects of Eyes. = 22
Active Syphilis = 6
Active Syphilis with other Diseases = 12
Ptosis of Liver = 1
Hernia = 1

207

Notes: Many of those with Diseases of Lungs were of poor physique.

It was found that 20 out of the 22 men rejected for eye conditions gave a history of Mines Service.

REMARKS: The poor physique of Mines Recruits is a matter for concern. It raises the question as to how far the Bechuana generally at present are suited for mining.

Obviously to make it possible for the men to be accepted for service, the Recruiting Corporation has fixed the minimum weight at 108 lbs. Personally I feel the figure is too low and wish to see it raised to 120 lbs. A man of average height who is less than 120 lbs. is more liable to contract pulmonary disease later, and spread such disease, which is already too common.

Syphilis is undoubtedly a factor in causing a low standard of physique. While only a few men presented themselves with active syphilis, many showed evidence of past infection.

Vegetables, fruit and milk that would supply the necessary vitamins are lacking in the dietary of the people.

Insufficiency of food caused by drought, famine and waste of corn seem also to play a part in undermining health.

Other adverse factors are the poor housing conditions, the lack of sanitation, the chronic diseases that are so common, and the want of knowledge in regard to food values.

The foregoing Report may emphasise the difficulties encountered by an examining Medical Officer, and show the causes for disappointment to Recruiting Agent and Recruits in the large number of rejections.

(Signed) P.M. SHEPHERD.
M.B., CH.B.

Molepolole, B.P.
June, 1933.